In the Claims

This listing of claims will replace all prior versions and listings of claims in the application:

1. (Currently Amended) A server for a merchant computer system, the server comprising:

a file store configured to store a range of audio/video products in respective product files and client history data, the client history data ~~including~~ includes a personal client file for individually identified clients ~~storing~~ and stores past purchasing records of the client;

a dialogue unit operable to invite and receive a client selection from among the products, to identify a personal client file corresponding to the client, and to define a degrade level signal dependent upon the identified personal client file containing client history data stored in the file store;

a product reader connected to read the product files from the file store to generate a digital audio/video signal; and

a signal processing unit having an input selectively connectable to receive the digital audio/video signal from the product reader, a processing core operable to apply a defined level of content degradation to the digital audio/video signal creating a degraded digital audio/video signal having a degradation in perceived quality corresponding to the defined degrade level signal of the dialogue unit, and an output connected to output the degraded digital audio/video signal.

Claims 2 to 34. (Canceled)

35. (Currently Amended) A method of operating a server of a merchant computer system, the method comprising:

inviting a client to make a selection from a range of audio/video products stored by the server in product files;

receiving a client selection for evaluation of one of the products;

reading the selected product file to generate a digital audio/video signal;

storing client history data, ~~including~~ the client history data includes a personal client file for individually identified clients ~~storing~~ and stores past purchasing records of the client;

identifying a personal client file corresponding to the client;

defining a level of content degradation dependent on the identified personal client file containing client history data;

applying the defined level of content degradation to the digital audio/video signal to generate a degraded digital audio/video signal having a degradation in perceived quality corresponding to said defined level of content degradation; and

outputting the degraded digital audio/video signal to the client.

Claim 36. (Canceled)

37. (Previously Presented) A method of operating a server of a merchant computer system, the method comprising:

inviting a client to make a selection from a range of audio/video products stored by the server in product files;

receiving a client selection for evaluation of one of the products;

reading the selected product file to generate a digital audio/video signal;

defining a level of content degradation dependent on an authorization response received by the server from a remote payment

gateway computer system following an authorization request by the server including a client i.d., a client payment instrument and a monetary value of the product selected for evaluation by

the server transmitting to the client a request for identification of type of payment authorization,

the client transmitting to the server identification of a type of payment authorization selected from among a plurality of differing types of payment authorizations,

defining at the server a level of content degradation as a function of the identified type of payment authorization;

applying the defined level of content degradation to the digital audio/video signal to generate a degraded digital audio/video signal having a degradation in perceived quality corresponding to said defined level of content degradation; and

outputting the degraded digital audio/video signal to the client.

38. (Original) A method according to claim 35, utilizing a digital signal processor to apply the defined level of content degradation to the digital data stream.

39. (Currently Amended) A method of communicating between a client, server and gateway on a computer network, the method comprising:

a) the server storing client history data, ~~including~~ the client history data includes a personal client file for individually identified clients ~~storing~~ and stores past purchasing records of the client;

b) the client establishing communication with the server to identify the client and a client payment instrument to the server;

c) the server identifying a personal client file corresponding to the client;

d) the server transmitting to the client a range of audio/video products for supply in return for payment;

e) the client transmitting to the server an evaluation request for one of the products;

f) the server and gateway communicating to obtain payment authorization for the requested product from the payment instrument;

g) the server defining a level of content degradation as a function of client history stored in the identified personal client file;

h) the server transmitting to the client a degraded evaluation version of the selected product without payment authorization, the degraded evaluation version of the selected product having a degraded perceived quality corresponding to the level of content degradation;

i) the client transmitting to the server a payment decision;

j) the server and gateway communicating to effect payment capture for the authorized payment; and

k) the server transmitting to the client a non-degraded version of the selected product.

40. (Canceled)

41. (Previously Presented) A method of communicating between a client, server and gateway on a computer network, the method comprising:

a) the client establishing communication with the server to identify the client and a client payment instrument to the server, the client payment instrument selected from among a plurality of differing types of client payment instruments;

b) the server transmitting to the client a range of audio/video products for supply in return for payment;

c) the client transmitting to the server an evaluation request for one of the products;

d) the server and gateway communicating to obtain payment authorization for the requested product from the payment instrument;

e) the server defining a level of content degradation as a function of said client payment instrument;

f) the server transmitting to the client a degraded evaluation version of the selected product without payment authorization, the degraded evaluation version of the selected product having a degraded perceived quality corresponding to the level of content degradation;

g) the client transmitting to the server a payment decision;

h) the server and gateway communicating to effect payment capture for the authorized payment; and

i) the server transmitting to the client a non-degraded version of the selected product.

42. (Currently Amended) A server apparatus comprising:

means for supplying a range of audio/video products as respective digital audio/video signals;

means for storing client history data, ~~including~~ the client history data includes a personal client file for individually identified clients ~~storing~~ and stores past purchasing records of the client;

means for inviting and receiving a client selection from among the products via a network connection;

means for identifying a personal client file corresponding to the client;

means for defining a level of content degradation as a function of the identified personal client file;

means for processing the digital audio/video signal associated with the selected product to apply the defined level of content degradation thereto; and

means for outputting the degraded digital audio/video signal to the network connection, the degraded digital audio/video signal having a degraded perceived quality corresponding to the defined level of content degradation, whereby a degraded version of the selected product is supplied to the client.

43. (Currently Amended) A merchant computer system comprising a server and a client interconnectable over a network, wherein the server comprises:

a file store configured to store a range of audio/video products in respective product files and client history data, the client history data ~~including~~ includes a personal client file for individually identified clients ~~storing~~ and stores past purchasing records of the client;

a dialogue unit having a network connection and operable to invite and receive a client selection from among the products via the network connection, to identify a personal client file corresponding to the client, and to define a level of content degradation dependent upon the personal client file containing client history data stored in the file store;

a product reader connected to read the product files from the file store to generate a digital audio/video signal; and

a signal processing unit having an input connectable to receive the digital audio/video signal from the product reader, a processing core operable to apply a defined level of content degradation to the digital audio/video signal creating a degraded digital audio/video signal having a degradation in perceived quality corresponding to said defined level of content degradation of the dialogue unit, and an output connected to output the

degraded digital audio/video signal from the processing core to the network connection.

44 (Original) The system of claim 43, wherein the client comprises an audio/video reproduction system operable to play the audio/video product communicated by way of the digital audio/video signal.

45. (Original) The system of claim 43, the server further including an output stage operatively arranged between the output of the signal processing unit and the network connection, the output stage having a packetizer for sub-dividing the degraded digital audio/video signal into encrypted data packets and associating decryption keys with each encrypted data packet, the dialogue unit being operable to supply a packet decoder to the client over the network for decoding the digital video/audio signal, and wherein the client includes an input stage connected to receive the packet decoder and load the packet decoder into a decoder host, the client input stage further comprising an input connected to receive the data packets and supply the data packets to the decoder host for packetwise decoding by applying the packet decoder with the associated decryption key of the data packet concerned, wherein the client input stage is configured to corrupt the decryption key of any given data packet before the decoded data of that packet is transmitted from the input stage in a form playable by the reproduction system.

46. (Currently Amended) A method of communicating between a client, server and gateway on a computer network, the method comprising:

a) the server storing client history data, ~~including~~ the client history data includes a personal client file for

individually identified clients ~~storing~~ and stores past purchasing records of the client;

b) the client establishing communication with the server to identify the client;

c) the server identifying a personal client file corresponding to the client;

d) the server transmitting to the client a range of audio/video products for supply in return for payment;

e) the client transmitting to the server an evaluation request for one of the products;

f) the server defining a level of content degradation as a function of client history stored in the identified personal client file;

g) the server transmitting to the client a degraded evaluation version of the selected product without payment authorization, the degraded evaluation version of the selected product having a degraded perceived quality corresponding to the level of content degradation;

h) performing steps d) through g) at least once;

i) the client transmitting to the server a purchase decision and payment instrument;

j) the server and gateway communicating to obtain payment authorization for the requested product from the payment instrument;

k) the server and gateway communicating to effect payment capture for the authorized payment; and

l) the server transmitting to the client a non-degraded version of the selected product.

Claims 47 and 48. (Canceled)

49. (Previously Presented) The method of claim 35, wherein:

said step of applying a defined level of content degradation includes inserting noise into the digital audio/video signal to degrade signal quality.

50. (Previously Presented) The method of claim 35, wherein:

said step of applying a defined level of content degradation includes:

performing a discrete Fourier transform on the digital audio/video signal to obtain a frequency domain representation of the digital audio/video signal;

frequency modulating the frequency domain representation of the digital audio/video signal; and

performing an inverse discrete Fourier transform unit on the frequency modulated frequency domain representation of the digital audio/video signal to reconstruct a time domain representation of the digital audio/video signal;

wherein the frequency modulating effects a degradation of perceived signal quality in the reconstructed digital audio/video signal.

51. (Previously Presented) The method of claim 50, wherein:

said step of frequency modulating includes one or more of the following frequency band rejection, frequency low pass filtering and frequency high pass filtering to effect a degradation of perceived signal quality.

52. (Previously Presented) The method of claim 50, wherein:

said step of frequency modulating includes phase inversion over at least one range of frequency components to degrade signal quality.

53. (Previously Presented) The method of claim 50, wherein:

said digital audio/video signal includes a digital audio signal; and

said step of frequency modulating includes inserting masked sound contributions adjacent amplitude peaks of the frequency domain representation of the digital audio signal to degrade signal quality.

54. (Previously Presented) The method of claim 50, further including the step of:

mixing a signal with the digital audio/video signal before performing the discrete Fourier transform to effect a degradation of perceived signal quality.

55. (Previously Presented) The method of claim 54, further comprising:

frequency modulating the digital audio/video signal following mixing and before the performing the inverse discrete Fourier transform, the frequency modulating including band-pass filtering to suppress frequency contributions lying outside a selected frequency range to effect a degradation of perceived signal quality.

56. (Previously Presented) The method of claim 55, wherein:

said frequency modulating includes inserting masked sound contributions adjacent the mixing frequency to degrade signal quality.

57. (Previously Presented) The method of claim 35, wherein:

the digital audio/video signal includes a digital video signal;

the method further comprising:

holding frames of the digital video signal in a frame buffer; and

manipulating frames held in the frame buffer to generate a degraded digital video signal.

58. (Previously Presented) The method of claim 57, wherein:

the digital video signal consists of an MPEG standard video signal including as frame types I-frames, P-frames and B-frames; and

wherein said step of manipulating frames includes

identifying the frame type of frames held in the frame buffer, and

performing frame manipulation of held frames according to frame type so as to effect a degradation of perceived video signal quality.

59. (Previously Presented) The method of claim 57, wherein:

the digital video signal consists of an MPEG standard video signal including data blocks, each comprising a plurality of pixels; and

wherein said step of manipulating frames includes varying the pixels of the data blocks of at least selected ones of held frames so as to effect a degradation of perceived video signal quality.

60. (Previously Presented) The method of claim 57, wherein:

the digital video signal includes an MPEG standard video signal including motion vectors; and

wherein said step of manipulating frames includes varying the motion vectors of at least selected ones of the held frames so as to effect a degradation of perceived video signal quality.

61. (Previously Presented) The method of claim 57, wherein:

the digital video signal consists of an MPEG standard video signal including objects; and

wherein said step of manipulating frames includes manipulating the objects of at least selected ones of the held frames so as to effect a degradation of perceived video signal quality.

62. (Previously Presented) The method of claim 35, wherein:

said digital audio/video signal includes a multi-channel digital audio signal; and

said step of applying the defined level of content degradation includes switching individual channels within the multi-channel digital audio signal to apply spatial modification to the digital audio signal so as to effect a degradation of perceived digital audio signal quality.

63. (Previously Presented) The method of claim 35, wherein:

said digital audio/video signal includes a multi-channel digital audio signal; and

said step of applying the defined level of content degradation includes inverting the phase of at least one of the channel of the multi-channel digital audio signal so as to effect a degradation of perceived digital audio signal quality.

64. (Previously Presented) The method of claim 35, wherein:

said digital audio/video signal includes a multi-channel digital audio signal; and

said step of applying the defined level of content degradation includes adding together individual ones of the channels of the multi-channel digital audio signal so as to effect a degradation of perceived digital audio/video signal quality.

65. (Previously Presented) The method of claim 35, wherein:

said digital audio/video signal includes a multi-channel digital audio signal; and

said step of applying the defined level of content degradation includes at least one of removing or attenuating of at least one of the channels of the multi-channel audio signal so as to effect a degradation of perceived digital audio/video signal quality.

66. (Previously Presented) The method of claim 35, wherein:

the digital audio/video signal includes an n-bit digital audio signal; and

said step of applying the defined level of content degradation includes converting the n-bit digital audio signal into an m-bit digital audio signal where m is less than n so as to effect a degradation of perceived digital audio signal quality.

67. (Previously Presented) The method of claim 35, wherein:

said step of applying the defined level of content degradation includes time modulating the digital audio/video signal so as to effect a degradation of perceived digital audio signal quality.

68. (Previously Presented) The method of claim 67, wherein:

said step of time modulating the digital audio/video signal to degrade signal quality includes at least one of:

speeding-up or slowing-down the digital audio/video signal;

changing in the value of data bits in volume, luminance or chrominance data contained within the digital audio/video signal; and

lengthening of a sampling period of the digital audio/video signal.

69. (Previously Presented) The method of claim 35, wherein:

said step of applying the defined level of content degradation includes

converting the digital audio/video signal into an analog audio/video signal,

analog processing the analog audio/video signal creating a degraded analog audio/vided signal having a degradation in perceived quality corresponding to said defined level of content degradation, and

converting the degraded analog signal into a degraded digital audio/video signal for output.

70. (Previously Presented) The method of claim 69, wherein:

the analog audio/video signal includes an analog audio signal; and

said step of analog processing includes frequency domain modulating the analog audio signal so as to effect a degradation of perceived audio signal quality.

71. (Previously Presented) The method of claim 70, wherein:

said step of frequency domain modulating includes one or more of band-reject filtering, low-pass filtering, high-pass filtering and frequency-selective phase inversion to effect a degradation of perceived audio signal quality.

72. (Previously Presented) The method of claim 35, wherein:

said step of applying the defined level of content degradation includes adding a secondary signal to the digital audio/video signal so as to effect a degradation of perceived digital audio/video signal quality.

73. (Previously Presented) The method of claim 72, further comprising:

generating said secondary signal to degrade signal quality.

74. (Previously Presented) The method of claim 73, wherein:

said step of generating said secondary signal generates a noise signal to degrade signal quality.

75. (Previously Presented) The method of claim 73, wherein:

said step of generating said secondary signal generates a content-based audio signal to degrade signal quality.

76. (Previously Presented) The method of claim 35, wherein:

said step of adding a secondary signal to the digital audio/video signal selects a level of the added secondary signal determined by said level of content degradation to degrade signal quality.

77. (Previously Presented) The server of claim 1, wherein:

the file store stores client history data whereby the personal client file stores data indicative of a record of prior purchases of audio/video products following output of a degraded digital audio/video signal by said signal processing unit; and

said dialogue unit is further operable to define the degrade level dependent upon the record of prior purchases of audio/video products.

78. (Previously Presented) The server of claim 77, wherein:

said dialogue unit is further operable to define the degrade level at a first degrade level for clients whose record of prior purchases of audio/video products following output of a degraded digital audio/video signal by said signal processing unit is high,

at a second degrade level higher than the first degrade level for clients whose record of prior purchases of audio/video products following output of a degraded digital audio/video signal by said signal processing unit is low, and at a third degrade level intermediate between the first degrade level and the second degrade level for new clients without a record of prior purchases.

79. (Previously Presented) The method of claim 35, wherein:

the step of storing client history data stores client history data whereby the personal client file stores data indicative of a record of prior purchases of audio/video products following output of a degraded digital audio/video signal by said signal processing unit; and

said step of defining a level of content degradation defines the degrade level dependent upon the record of prior purchases of audio/video products.

80. (Previously Presented) The method of claim 79, wherein:

said step of defining a level of content degradation further defines the degrade level at a first degrade level for clients whose record of prior purchases of audio/video products following output of a degraded digital audio/video signal by said signal processing unit is high, at a second degrade level higher than the first degrade level for clients whose record of prior purchases of audio/video products following output of a degraded digital audio/video signal by said signal processing unit is low, and at a third degrade level intermediate between the first degrade level and the second degrade level for new clients without a record of prior purchases.

81. (Previously Presented) The method of claim 37, wherein:

the plurality of differing types of payment authorizations includes at least one selected from the group consisting of credit card, debit card, electronic cash, electronic check and smart card.

82. (Previously Presented) The method of claim 39, wherein:

the step of the server storing client history data stores client history data whereby the personal client file stores data indicative of a record of prior purchases of audio/video products following output of a degraded digital audio/video signal by said signal processing unit; and

said step of the server defining a level of content degradation defines the degrade level dependent upon the record of prior purchases of audio/video products.

83. (Previously Presented) The method of claim 82, wherein:

said step of the server defining a level of content degradation further defines the degrade level at a first degrade level for clients whose record of prior purchases of audio/video products following output of a degraded digital audio/video signal by said signal processing unit is high, at a second degrade level higher than the first degrade level for clients whose record of prior purchases of audio/video products following output of a degraded digital audio/video signal by said signal processing unit is low, and at a third degrade level intermediate between the first degrade level and the second degrade level for new clients without a record of prior purchases.

84. (Previously Presented) The method of claim 41, wherein:

the plurality of differing types of payment authorizations includes at least one selected from the group consisting of credit card, debit card, electronic cash, electronic check and smart card.

85. (Previously Presented) The server apparatus of claim 42, wherein:

the means for storing client history data whereby the personal client file stores data indicative of a record of prior purchases of audio/video products following output of a degraded digital audio/video signal to the network connection; and

the means for defining a level of content degradation defines the degrade level dependent upon the record of prior purchases of audio/video products.

86. (Previously Presented) The server of claim 85, wherein:

means for defining a level of content degradation defines the degrade level at a first degrade level for clients whose record of prior purchases of audio/video products following output of a degraded digital audio/video signal to the network connection is high, at a second degrade level higher than the first degrade level for clients whose record of prior purchases of audio/video products following output of a degraded digital audio/video signal to the network connection is low, and at a third degrade level intermediate between the first degrade level and the second degrade level for new clients without a record of prior purchases.

87. (Previously Presented) The merchant computer system of claim 43, wherein:

the file store stores client history data whereby the personal client file stores data indicative of a record of prior purchases of audio/video products following output of a degraded digital audio/video signal by said signal processing unit; and

the dialogue unit is further operable to define the degrade level dependent upon the record of prior purchases of audio/video products.

88. (Previously Presented) The merchant computer system of claim 87, wherein:

said dialogue unit is further operable to define the degrade level at a first degrade level for clients whose record of prior purchases of audio/video products following output of a degraded digital audio/video signal by said signal processing unit is high, at a second degrade level higher than the first degrade level for clients whose record of prior purchases of audio/video products following output of a degraded digital audio/video signal by said signal processing unit is low, and at a third degrade level intermediate between the first degrade level and the second degrade level for new clients without a record of prior purchases.

89. (Previously Presented) The method of claim 46, wherein:

the step of the server storing client history data stores client history data whereby the personal client file stores data indicative of a record of prior purchases of audio/video products following output of a degraded digital audio/video signal by said signal processing unit; and

said step of the server transmitting to the client a degraded evaluation version of the selected product defines a degrade level dependent upon the record of prior purchases of audio/video products.

90. (Previously Presented) The method of claim 89, wherein:

said step of the server transmitting to the client a degraded evaluation version of the selected product further defines the degrade level at a first degrade level for clients whose record of prior purchases of audio/video products following output of a degraded digital audio/video signal by said signal processing unit is high, at a second degrade level higher than the first degrade

level for clients whose record of prior purchases of audio/video products following output of a degraded digital audio/video signal by said signal processing unit is low, and at a third degrade level intermediate between the first degrade level and the second degrade level for new clients without a record of prior purchases.